



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,259	07/08/2003	Calvin D. VanBuskirk	T370 0002	6051
720	7590	09/21/2004	EXAMINER	
OYEN, WIGGS, GREEN & MUTALA			SALDANO, LISA M	
480 - THE STATION			ART UNIT	PAPER NUMBER
601 WEST CORDOVA STREET				
VANCOUVER, BC V6B 1G1			3673	
CANADA			DATE MAILED: 09/21/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/614,259	VANBUSKIRK ET AL.	
	<b>Examiner</b> Lisa M. Saldano	<b>Art Unit</b> 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 8/4/2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-7,9-14 and 16-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 1-7, 9-14 and 16-18 is/are allowed.

6)  Claim(s) \_\_\_\_\_ is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

**DETAILED ACTION**

*Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Regarding the specification in light of the most recent claim amendments, the applicant has amended claim 1 to recite limitations comprising steps of “connecting the archway form to the reinforced soil and removing the pair of parallel temporary footings.” It appears that the only disclosure provided by the applicant in the specification in regard to the removing step is contained on page 3, paragraph [0008]. However, in paragraph [0008], the applicant fails to provide ample disclosure of the removal step. The specification does not disclose exactly how this removing step is achieved.

*Allowable Subject Matter*

2. Claims 1-7, 9-14 and 16-18 would be allowable over the prior art of record.

3. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 1 and 11, the closest prior art of record, Fisher (4,010,617), discloses a composite arch structure, capable of functioning as an underpass structure, comprising an arched liner 1 with compacted fill material 2 thereby forming a soil arch generally indicated by 3 (see

Fig.1 and column 4, lines 50-55). Fisher states that the disclosed soil arch structure can be made to sustain 90 percent or more of the live load, while the liner sustains 10 percent or less. Since dead load is inherently included in the weight bearing capability of the structure, the dead load is also sustained by the structure. However, Fisher fails to disclose that the substantially self-standing arch structure comprises a combination of interacting layers of mineral soil and reinforcement material and parallel temporary footings in combination with the rest of the limitations of claims 1 and 11 as recited by the applicant.

***Response to Arguments***

4. Applicant's arguments, see the amendment, filed 8/4/2004, with respect to claims 1-7, 9-14 and 16-18 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of objection presented in this Office action. For example, the applicant has amended the claims to include a method comprising removing a pair of parallel temporary footings, thereby raising an issue of lack of antecedent basis in the specification.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

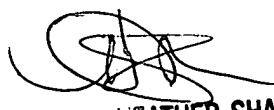
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms

  
HEATHER SHACKELFORD  
PATENT EXAMINER  
TECHNOLOGY CENTER 3600